2024-2025 Annual Academic Assessment Plan Bachelor of Science in Electrical Engineering

Mission

The Bachelor of Science in Electrical Engineering degree at HPU involves the application of engineering principles to electrical systems and devices for purposes of diagnostics, maintenance, innovation or design, development, testing and commissioning with core expertise in electrical circuits, signals and systems, control and microcontroller systems, electronics, digital hardware, communications technology, embedded systems, and power. Students apply fundamentals in topics of electricity, electromagnetism and electronics to proceed toward specialization in advanced topics, such as computer architecture, network engineering, renewable energy, robotics and automation, intelligent control, image and audio processing, and modeling of engineering process-based systems.

Academic year 2025

Bachelor of Science in Electrical Engineering Learning Outcomes

PLO4 (ABET SO4)

An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

MEASURES	RESULTS	ACTIONS
HPU ILO: Information Literacy Direct - Other Target At least 50% of the students must have the average outcome score above 2 as deteremined the HPU ILO's Information Literacy assessment system. HPU Information Literacy Rubric - Spring 201 6.docx	MET Analysis Three EE students were included in this measure. One of them obtained average outcome score of 0.33 while the other had average outcome score of 2.33 and 3. Judging by the categories in which the student with poor performance, it is not clear whether the student was able to complete all the required questions.	No actions have been added.
Ethics Reports and Ethics Discussion The rubric below shows the assessment strategy as well as scoring done for this cohort. Direct - Other Engineering Design Project I: ENGR 3500 Target	MET EthicsScores.pdf Student 1 Ethics Report.docx Student 2 Ethics Report.pdf Student 3 Ethics Report.pdf Student 4 Ethics Report.pdf Analysis	No actions have been added.
The average score for the entire course based on the rubric must be greater than 2.5 <u>SO4_EErubric.xlsx</u>	ENGR 3500: Engineering Design Project 1 was used for assessment. The rubric for SO4 was used by evaluating the engineering ethics case report and online discussion on three other engineering ethics topics. All 5 students were evaluated and their average scores were assessed for each of the two Performance Indicators. No action item was triggered since the average course score for all three PIs was > 2.5. The students demonstrated by considering multiple impact areas (global, economic, environmental, societal) in engineering decisions and they provided reasonable justification using available information.	